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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mitsuharu Ohki

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

PETERSON, CHRISTOPHER K

ART UNIT

PAPER NUMBER

2622

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,659	Applicant(s) OHKI, MITSUHARU	
	Examiner CHRISTOPHER K. PETERSON	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3, 4, 19, and 20 have been considered but are moot in view of the new ground(s) of rejection. Examiner withdraws the objection to the title of the application, the 35 U.S.C. 112 Rejection of claims 1, 19, and 20 and the 35 U.S.C. 101 Rejection of claim 20.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 3, 4, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ko (Japanese Patent Pub. # 2000-069352).

As to claim 1, Ko teaches a control method provided for a photographing apparatus (digital still camera) having a first mode for generating an output image by taking one input image (1-time photography mode) and a second mode (seriography mode) for generating an output image by taking a plurality of input images successively without using a binning function, the control method comprising: comparing at least one of a first exposure time ($1/f$ seconds < shaking hand full limits), which is an exposure time ($1/f$ seconds) of a photographing operation to take an input image when said

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photographing operation is to be carried out in said first mode (1-time photography mode), and a second exposure time ($1/f$ seconds > shaking hand full limits), which is an exposure time ($1/f$ seconds) of a photographing operation to take a plurality of input images without using said binning function when said photographing operation is to be carried out in said second mode (seriography mode), with a predetermined threshold value (shaking hand full limits); determining (5) whether or not said first exposure time ($1/f$ seconds) is equal to or shorter than said predetermined threshold value (shutter speed full limits); making a first decision (1-time photography) to take an image in said first mode (1-time photography) if said first exposure time is equal to or shorter than said predetermined threshold value (shutter speed full limits); and making a second decision to take an image in said second mode (seriography mode) if said first exposure time ($1/f$ seconds) is neither equal to nor shorter than said predetermined threshold value (shutter speed full limits) (Para 20 - 32).

Ko teaches the arithmetic unit 5 calculates a required light exposure first from field luminosity and a diaphragm value, and, subsequently determines the number of times of a seriography from the focal distance of a lens. If the focal distance of the lens 1 in the 35-mm version conversion is set to fmm, in the usual user, it is supposed that they are $1/f$ second of shutter speed full limits (it is hereafter considered as shaking hand full limits) which do not generate blur (Para 20). Examiner analyzes this to mean if the shutter speed is faster than the shutter speed full limits only one image is captured with no blur. The second mode is if the focal distance of the lens 1 is 50 mm in the 35-mm version conversion and the shutter speed for obtaining a required light exposure

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from field luminosity and the present diaphragm value is $1/30$ seconds here, Since shaking hand full limits will be $1/50$ seconds, MPU5 determines that it will perform photography twice in shutter speed $1/60$ seconds. In this case, an equivalent light exposure can be obtained also by performing photography for shutter speed $1/240$ seconds 8 times, but when shutter speed is carried out early and exposure time is shortened not much. Examiner analyzes this to mean if the arithmetic unit determines the shutter speed ($1/30$) is slower than the shutter speed full limit ($1/50$), then the arithmetic unit (5) divides the shutter speed ($1/30$) into multiple (8 times) image captures at a fast shutter speed ($1/240$). Ko teaches it is desirable to switch automatically between 1-time photography according to the luminosity of a photographic subject and the focal distance of a lens. Namely, what is necessary is just to make it go into the mode of the seriography of this embodiment, when the focal distance of the lens was set to fmm by the 35-mm version conversion and shutter speed later than $1/f$ second of shaking hand full limits is required (Para 29). Ko also teaches if the demanded shutter speed is a n/f second, the shutter speed $1/f$ seconds n times, for example, and combining the picture of n sheets by forming the switch that a user can set up shutter speed arbitrarily, will also be considered. Image composing with a S/N ratio good thereby more will be obtained. Long exposure can be considered as this application (Para 30). Examiner analyzes this to mean that no binning function is used to capture an image in the seriography mode. Ko teaches by compounding (adding) the image data concerning the picture by which multiple-times photography (seriography) was carried out by exposure time shorter than suitable exposure time, although there are

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few shaking hands, the picture by a suitable light exposure can be formed. Examiner analyzes the term “seriography” to mean a series of images captured at a fast shutter speed to equal the actual determined shutter speed to create an image without blur.

As to claim 3, Ko teaches wherein said predetermined threshold value (shaking hand full limits) is a limit of exposure time not causing effects of hand trembling (camera shake) on said input image taken in said first mode (1-time photography) (Para 21). Examiner analyzes the limitation “shaking hand full limits” to mean the image is blurred above the threshold.

As to claim 4, Ko teaches wherein said predetermined threshold value (shaking hand full limits) is a value based on a focal distance (focal distance) used at an image-pickup time (imaging means 3) to take said input image (Para 20, 21, and 29). Ko teaches the arithmetic unit 5 calculates a required light exposure first from field luminosity and a diaphragm value, and, subsequently determines the number of times of a seriography from the focal distance of a lens. If the focal distance of the lens 1 in the 35-mm version conversion is set to fmm, in the usual user, it is supposed that they are $1/f$ second of shutter speed full limits (it is hereafter considered as shaking hand full limits) which do not generate blur.

As to claims 19 and 20, these claims differ from claim 1 only in that the claim 1 is a method claim whereas claim 19 and 20 are apparatus and computer readable medium claims respectively. Thus claim 19 and 20 are analyzed as previously discussed with respect to claim 1 above. Applicant has amended the independent

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claims 19 and 20 along the same general lines that claim 1 has been amended (Page 15 of Applicant's Remarks).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER K. PETERSON whose telephone number is (571)270-1704. The examiner can normally be reached on Monday - Friday 6:30 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K. P./
Examiner, Art Unit 2622
9/16/2010

/Sinh Tran/
Supervisory Patent Examiner, Art Unit 2622